

REMARKS

This is in response to the Office Action of January 8, 2007. Claim 1 is amended, based upon such disclosure as that in the last full paragraph on page 6 of the specification ("The ratio of the aromatically condensed ring-containing cycloolefin monomer to all the amount of the cycloolefin monomers is ... preferably in the range of 10 to 95 weight % and more ... in consideration of a balance between flame retardance and mechanical properties of the molded product"). Claim 3 ("The polymerizable composition according to claim 1, wherein the amount of the monomer having the condensed ring is in the range of 10 to 95 weight % per all the amount of the cycloolefin monomers") is accordingly cancelled, without prejudice. New claims 7 and 8 are added, based upon disclosure in the paragraph bridging pages 5-6 of the specification. New claim 9 is identical to former claim 6; claim 6 is accordingly cancelled, without prejudice. Claims 1, 2, 4, 5, and 7-9 are pending in the application.

THE INVENTION. The polymerizable composition recited in amended claim 1 uses a cycloolefin monomer reactant that contains a monomer having a condensed ring made of an aliphatic ring having one or more carbon-carbon double bonds and an aromatic ring (aromatically condensed ring-containing cycloolefin monomer) contained in an amount of 10 weight-% or more with respect to all of the cycloolefin monomers in the polymerizable composition. The polymerizable composition of this invention solves the problem that a molded product obtained by using a cycloolefin monomer, a flame retardant, and a metathesis polymerization catalyst generates a toxic gas originating from the flame retardant. In the present invention, at least one of the above-mentioned aromatically condensed ring-containing cycloolefin monomers is used as the cycloolefin monomer. The use of the aromatically condensed ring-containing cycloolefin monomer decreases the amount of the flame retardant necessary to impart a given degree of flame retardancy to the composition, and thus solves the stated problem.

Claims 1-6 were rejected under 35 U.S.C. § 103(a) as being unpatentable over GB 1,533,124 ("Showa Denko"), alone or in view of EP 0 283 719 A2 ("Hara"). The rejection is respectfully traversed as to the claims in their present form.

In the present invention, the amount of the aromatically condensed ring-containing cycloolefin monomer contained in the polymerizable composition is 10 weight-% of more relative to all of the cycloolefin monomer reactants. This permits the use of a smaller amount of flame retardant, and also improves the moldability of the polymerizable composition.

The Showa Denko reference and the Hara reference are completely silent relative to setting the amount of aromatically condensed ring-containing cycloolefin monomer to the above-mentioned range, as required by Applicant's claims. The Showa Denko and Hara references are also silent with regard to use of an aromatically condensed ring-containing cycloolefin monomer to decrease the amount of flame retardant that is necessary. Accordingly, persons of ordinary skill in the art would not employ the aromatically condensed ring-containing cycloolefin monomer – as in the present invention – to decrease the amount of flame retardant used. It goes without saying that persons of ordinary skill in the art would not derive from the Showa Denko reference and the Hara reference any suggestion that flame retardance and moldability could be balanced by setting the amount of the aromatically condensed ring-containing cycloolefin monomer employed to the predetermined range recited in amended claim 1.

Enclosed herewith is a Declaration under 37 CFR 1.132 of Shigeru Fujita. The Fujita Declaration describes experiments conducted on two laminates made with polymerizable compositions in accordance with the present invention. The Declaration indicates that for the laminates of the present invention, the flaming times were 7 seconds (Experiment 1) and 2 seconds (Experiment 2). In contrast, in Comparative Examples 1 and 2 in the specification, the flaming times were 30 seconds or more for both laminates.

It is clear from the above that independent claim 1 as amended herein, and claims 2, 4, 5, and 7-9 which depend therefrom, recite inventions that are neither taught nor suggested by the Showa Denko reference or the Hara reference, alone or in combination. Withdrawal of the rejection of record is earnestly solicited.

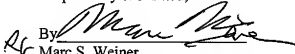
INOPERABILITY. Applicants submit that it is impossible to put the cited description of the Showa Denko reference into practice, for reasons explained in Appendix A.

If there are any questions concerning this application, the Examiner is invited to contact Richard Gallagher (Reg. No. 28,781) at (703) 205-8008.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.14; particularly, extension of time fees.

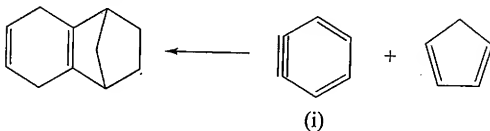
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Respectfully submitted,

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APPENDIX A

The compound (VIII) disclosed in GB124 and the compound used in Example 48 seem to be the same compound. In theory, it is impossible to synthesize such compound because the compound (i) shown below, which is necessary in synthesizing the compound, cannot exist.



Therefore, the rejections citing such disclosure are inappropriate.